TABLE M.5.6.1.2-4.—National Ignition Facility Accident Frequency and Consequence (Unfavorable Meteorology)

		MEI		Offsite Population ^a		Individual Noninvolved Worker		Noninvolved Worker Population	
Accident	Frequency (per year)	Dose (rem)	LCFs b	Dose (person- rem)	LCFs c	Dose (rem)	LCFs b	Dose (person- rem)	LCFs ^c
Earthquake during No Action Alternative operations	2.00 × 10 ⁻⁸	6.15×10^{-3}	3.69 × 10 ⁻⁶	3.05	1.83 × 10 ⁻³	1.33 × 10 ⁻²	8.01 × 10 ⁻⁶	2.22	1.33×10^{-3}
Earthquake during depleted uranium shot	2.00 × 10 ⁻⁹	1.10 × 10 ⁻²	6.57×10^{-6}	4.51	2.71×10^{-3}	2.25×10^{-2}	1.35×10^{-5}	3.74	2.24×10^{-3}
Earthquake during highly enriched uranium shot	2.00 × 10 ⁻⁹	1.14 × 10 ⁻²	6.84 × 10 ⁻⁶	4.67	2.80×10^{-3}	2.33×10^{-2}	1.40 × 10 ⁻⁵	3.83	2.30×10^{-3}
Earthquake during thorium shot	2.00×10^{-9}	1.14×10^{-2}	6.86×10^{-6}	4.76	2.86×10^{-3}	2.31×10^{-2}	1.39 × 10 ⁻⁵	4.10	2.46×10^{-3}
Earthquake during tracer shot	2.00 × 10 ⁻⁹	7.02×10^{-3}	4.21×10^{-6}	3.26	1.95×10^{-3}	1.52×10^{-2}	9.14 × 10 ⁻⁶	2.44	1.46×10^{-3}
Earthquake during plutonium without yield shot	2.00 × 10 ⁻⁹	2.16×10^{-2}	1.30 × 10 ⁻⁵	8.33	5.00 × 10 ⁻³	4.69×10^{-2}	2.82×10^{-5}	8.23	4.94×10^{-3}
Earthquake during plutonium with yield shot	2.00×10^{-9}	1.16×10^{-2}	6.96 × 10 ⁻⁶	4.98	2.99×10^{-3}	2.50×10^{-2}	1.50 × 10 ⁻⁵	4.27	2.56×10^{-3}

Source: LLNL 2003d.

LCFs = latent cancer fatalities; MEI = maximally exposed individual.

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 ^a Based on the population of approximately 6,900,000 persons residing within 50 miles of LLNL.
^b Increased likelihood of a latent cancer fatality.

^c Increased number of latent cancer fatalities.